

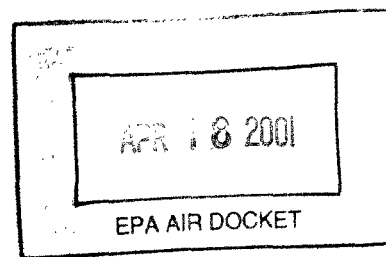
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March 6 2001

Sue Stendebach,
Chief Stratospheric Program Implementation Branch
Environmental Protection Agency
401 M St. S.W.
Washington D. C. 20460



Dear Ms. Stendebach:

First let me commend you and the staff on the obvious desire to listen to the concerns of the people most affected by the loss of methyl bromide. These are the people who can add science to the difficult decisions.

Please accept this clarification and elaboration on some of my remarks made at the February 18th meeting concerning Critical use and Emergency use exemptions for methyl bromide.

Insect control is critical in flour mills and other food processing plants because U. S. food laws classify insect contamination as "filth", thereby rendering such food adulterated and subject to seizure (Section 402 (a)3 and (a)4 of the Federal Food, Drug and Cosmetic Act). These Federal and State laws that forbid the marketing of insect contaminated food reflect the feeling of the American consumer. Americans want, and in fact insist, that their food be without insect contamination.

For over 60 years methyl bromide has been very effective in controlling insects in hidden areas that cannot be reached by other pest control methods. It is these hidden infestations that defy cleaning and other measures and result in food contamination. Finding a single replacement for the broad spectrum of uses for methyl bromide has not yet been accomplished.

Just as we should not give up on alternatives merely because a few have been tried without success, we must not assume that there is no problem simply because some alternatives have worked in some cases.

Food processing is very diverse and complex. There are no easy or text book answers. Only skilled people with a great deal of experience in pest prevention and control in various types of food operations can make the rational and reasonable evaluations required on the probable efficacy of each alternative. Programs that work in one plant

may not work in another and even programs that are satisfactory now may not work in the future.

A further complication involves the increasing reports of insect resistance to some of the alternative pesticides. Malathion is rarely used anymore because of resistance problems. A recent international meeting on Controlled Atmosphere and Other Fumigation Techniques devoted a half-day to studies on phosphine resistance by insects in various parts of the world. While this has not yet been a serious problem in the United States so far, global trade could increase the likelihood of future problems.

Indeed one of the most viable alternatives for methyl bromide in some cases is phosphine. Increased time for fumigation with phosphine is now a reality in many parts of the world. The down-time required can have a major impact on the ability of the food industry to provide an adequate amount of food.

The amount of time a food plant must shut down for fumigation is critical. With methyl bromide 24 hours under gas, and less than that amount of time for aeration is standard practice. The new global standard for tobacco fumigation with phosphine recognizes that many phosphine labels do not reflect the minimum time required to kill all life stages of the insects. This new Global Fumigation Standard for Tobacco states a minimum of 4 days for temperatures above 68 degrees F. and 6 days for cooler temperatures. With an extra day for aeration another day for sealing, this down-time minimum of six days would not be acceptable for most food processing plants.

In addition to the threat of insect resistance to phosphine, there is the problem of corrosion to copper, gold, silver and its alloys. Today's computer managed production has many controls that utilize these metals and there are many examples of delicate electrical equipment damaged during phosphine fumigation.

The newer formulation of phosphine with carbon dioxide in cylinders that EPA has approved, does permit a steady but lower level of phosphine that might reduce the chance of corrosion. However, this is yet to be tested over a period of time on various instruments and types of equipment and there is concern with these lower levels initiating phosphine resistance in the target insects.

The training manual for this product states that materials sensitive to phosphine should be protected or removed. These include but are not be limited to telephones, telephone switchboards, computers, copy machines, fax machines and all other devices with circuit boards. Their removal or protection would be difficult in most circumstances.

Sulfuryl fluoride is being considered as a replacement for methyl bromide. This fumigant has possibilities if the necessary restrictions are met, but it will require a longer fumigation exposure to control all insect stages, and therefore a longer production down-time. Sulfuryl fluoride is not yet registered for food processing plant use and there is not yet the necessary food additive tolerance for this chemical. Both are required for its use by most food processors.

It is not possible to abruptly shut a flour mill down for a fumigation and have no flour left in the bins or in the processing equipment. Therefore some product is always exposed to the fumigant.

Heat treatments have been used successfully in some flour mills and some food processing plants for almost 100 years but there are reasons why all plants cannot use this procedure. Some buildings and equipment are not constructed so that they can withstand the extreme heat required. Some products and packaging materials cannot be subjected to heat. Retention of heat in some areas has affected the health of some workers.

Treating of small insect harborages referred to as cracks and crevices can be effective. However, with the increase in cancellations and use restrictions, there are fewer and fewer residual insecticides available. Furthermore, these residual insecticides cannot be used in cracks and crevices inside equipment or food contact surfaces.

A concern to me is that EPA may be looking only at what pesticides or control techniques seem to be effective right now for some food processing plants without recognizing the complexity of the problem or the probability that it will become worse in the future. I respectfully suggest that EPA recognize that insect control in food processing facilities is critical as delineated in our food laws and the Clean Air Act and that continued use of methyl bromide be permitted where no alternative is appropriate.

Sincerely,

Vernon E. Walter
Board Certified Entomologist
W A W Incorporated

cc: Bill Thomas